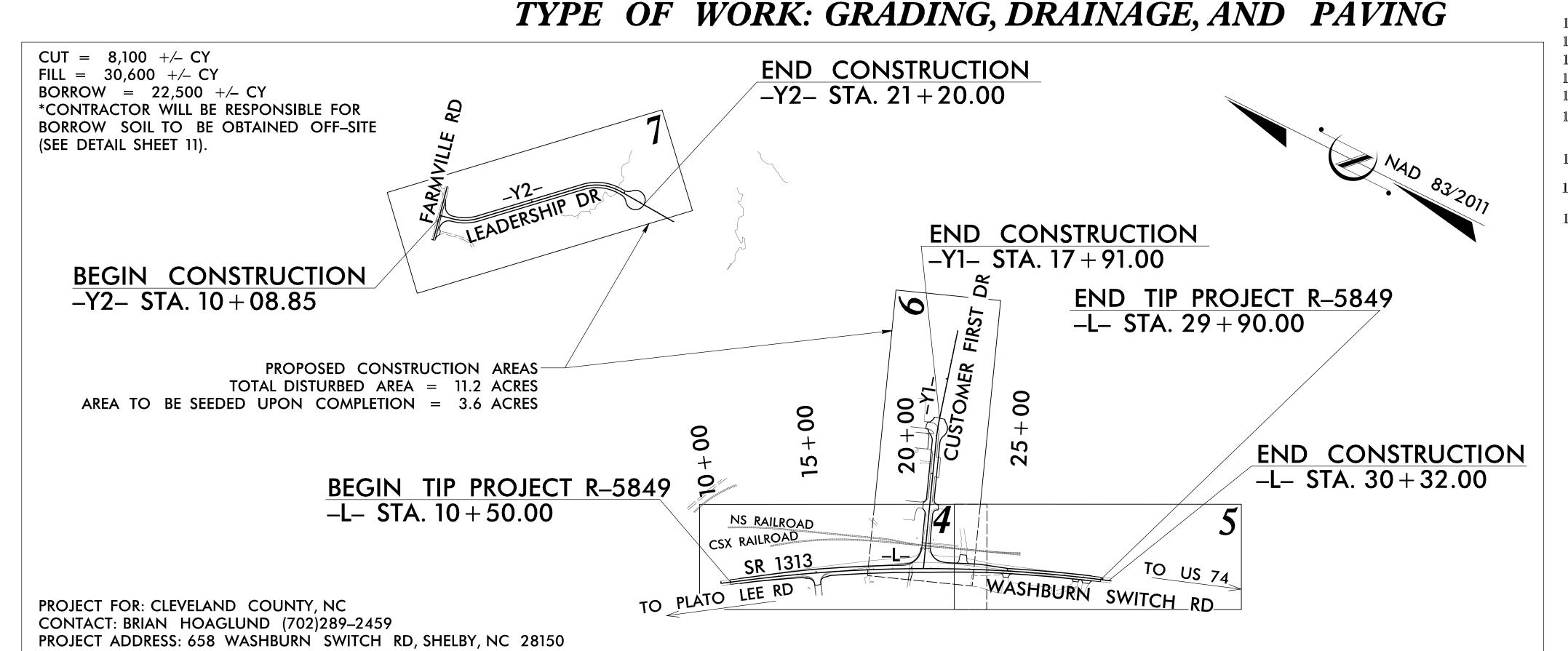
CLEVELAND COUNTY

PLAN FOR PROPOSED EROSION CONTROL

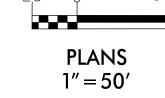
LOCATION: WASHBURN SWITH BUSINESS PARK ADDITION OF TURN LANES ON SR 1313 (WASHBURN SWITCH RD) AND NEW INDUSTRIAL ENTRANCES TO WASHBURN SWITCH BUSINESS PARK



STATE	STATE	SHEET NO.	TOTAL SHEETS		
N.C.		R=5849	EC-1	12	
STATE PROJ. NO.		F. A. PROJ. NO.	DESCRIPTI	ION	
47406.1.1		N/A	PE		
47	406.2.1	N/A	R/W &	UTIL	
47406.3.1		N/A	CON	CONST	

EROSION AND SEDIMENT CONTROL MEASURES Temporary Silt Ditch Temporary Silt Fence Special Sediment Control Fence Temporary Berms and Slope Drains Silt Basin Type B. Temporary Rock Silt Check Type-A Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM) 1633.02 Temporary Rock Silt Check Type-B. Wattle / Coir Fiber Wattle. Wattle / Coir Fiber Wattle with Polyacrylamide (PAM) Temporary Rock Sediment Dam Type-A Temporary Rock Sediment Dam Type-B... Rock Pipe Inlet Sediment Trap Type-A Rock Pipe Inlet Sediment Trap Type-B. Stilling Basin 1630.06 Special Stilling Basin Rock Inlet Sediment Trap: Туре А. 1632.01 1632.02 Type B. 1632.03Type C. Skimmer Basin Tiered Skimmer Basin Infiltration Basin THIS PROJECT CONTAINS

GRAPHIC SCALE



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 1, 2016 AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER RESOURCES.

Prepared in the Office of:

TGS ENGINEERS 804-C N. LAFAYETTE ST.

SHELBY, NC 28150



Designed by:

Andrew H. Cochrane

Reviewed in the Office of:

NC DEQ - MOORESVILLE REGIONAL

610 EAST CENTER AVE. MOORESVILLE, NC 28115

Reviewed by:

1604.01 Railroad Erosion Control Detail 1605.01 Temporary Silt Fence 1606.01 Special Sediment Control Fence 1607.01 Gravel Construction Entrance

1622.01 Temporary 3erms and Slope Drains

Roadway Standard Drawings

1630.01 Riser 3asin 1630.02 Silt 3asin Type 3 1630.03 Temporary Silt Ditch 1630.04 Stilling Basin

1630.05 Temporary Diversion 1630.06 Special Stilling Basin 1631.01 Matting Installation

Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2018 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of 1632.01 Rock Inlet Sediment Trap Type A 1632.02 Rock Inlet Sediment Trap Type 3

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design

EROSION CONTROL PLANS

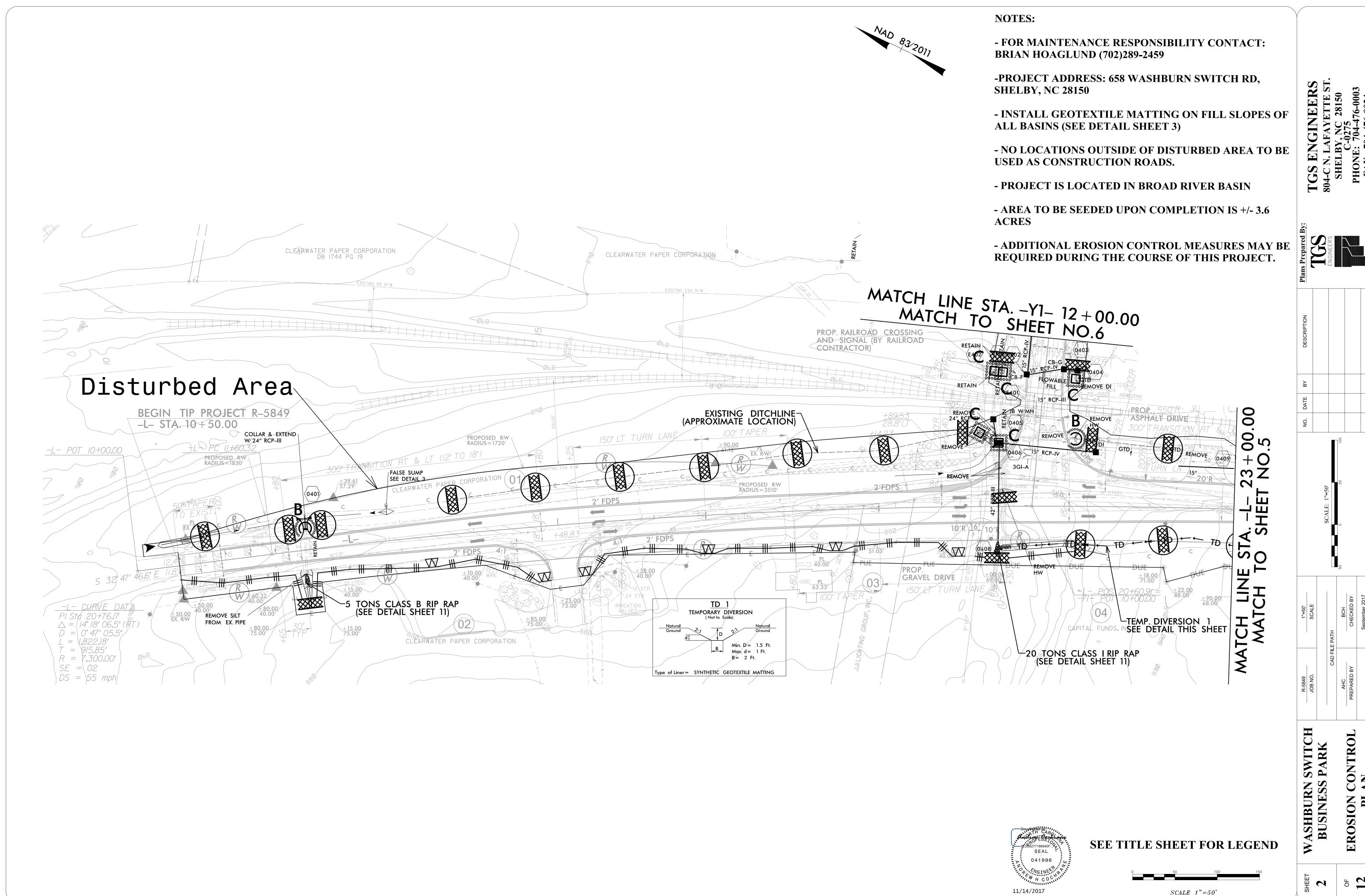
FOR CLEARING AND

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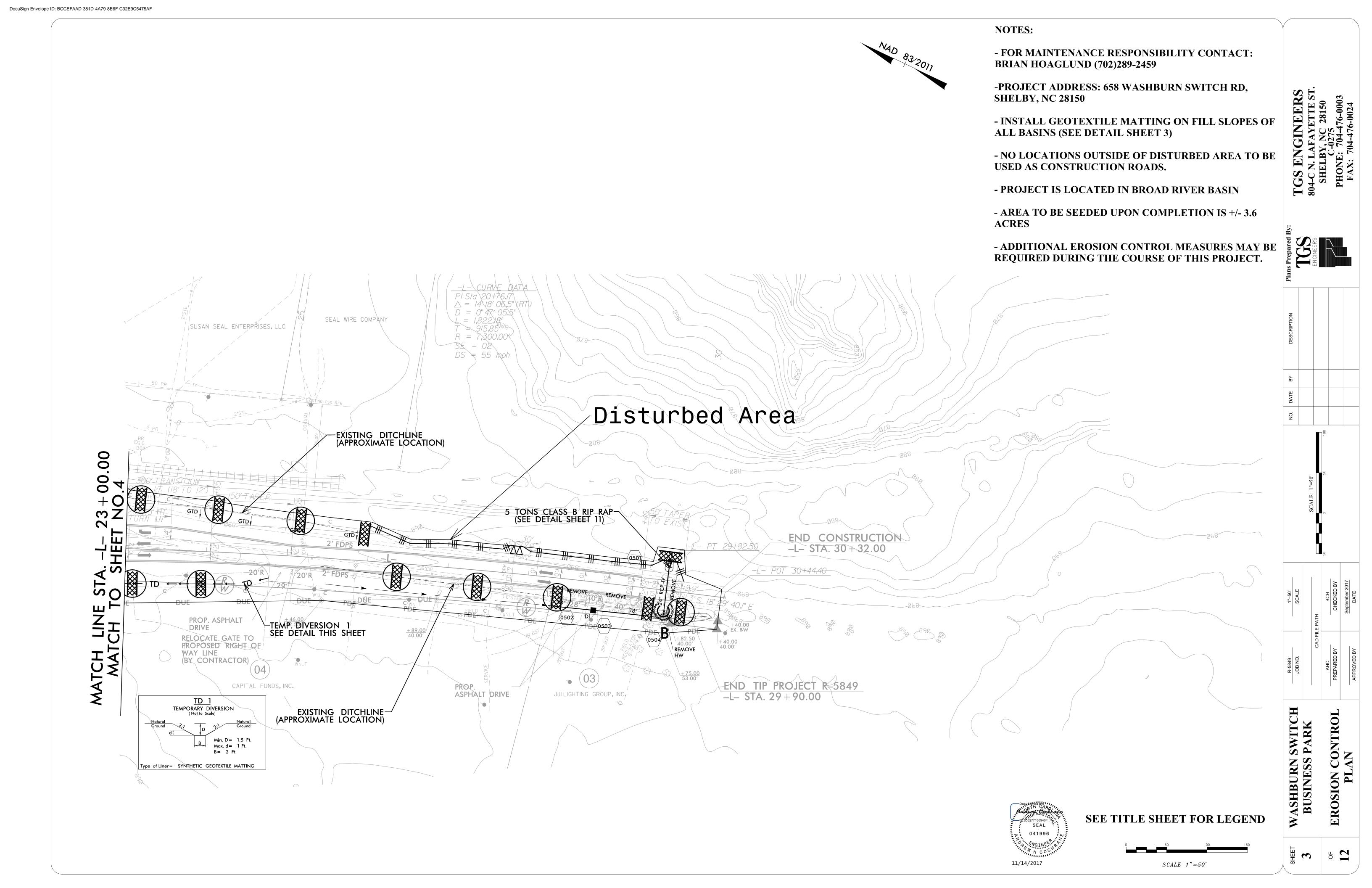
CONSTRUCTION.

1632.03 Rock Inlet Sediment Trap Type C 1633.01 Temporary Rock Silt Check Type A 1633.02 Temporary Rock Silt Check Type 3 1634.01 Temporary Rock Sediment Dam Type A 1634.02 Temporary Rock Sediment Dam Type 3
1635.01 Rock Pipe Inlet Sediment Trap Type A
1635.02 Rock Pipe Inlet Sediment Trap Type 3

1640.01 Coir Fiber 3affle 1645.01 Temporary Stream Crossing

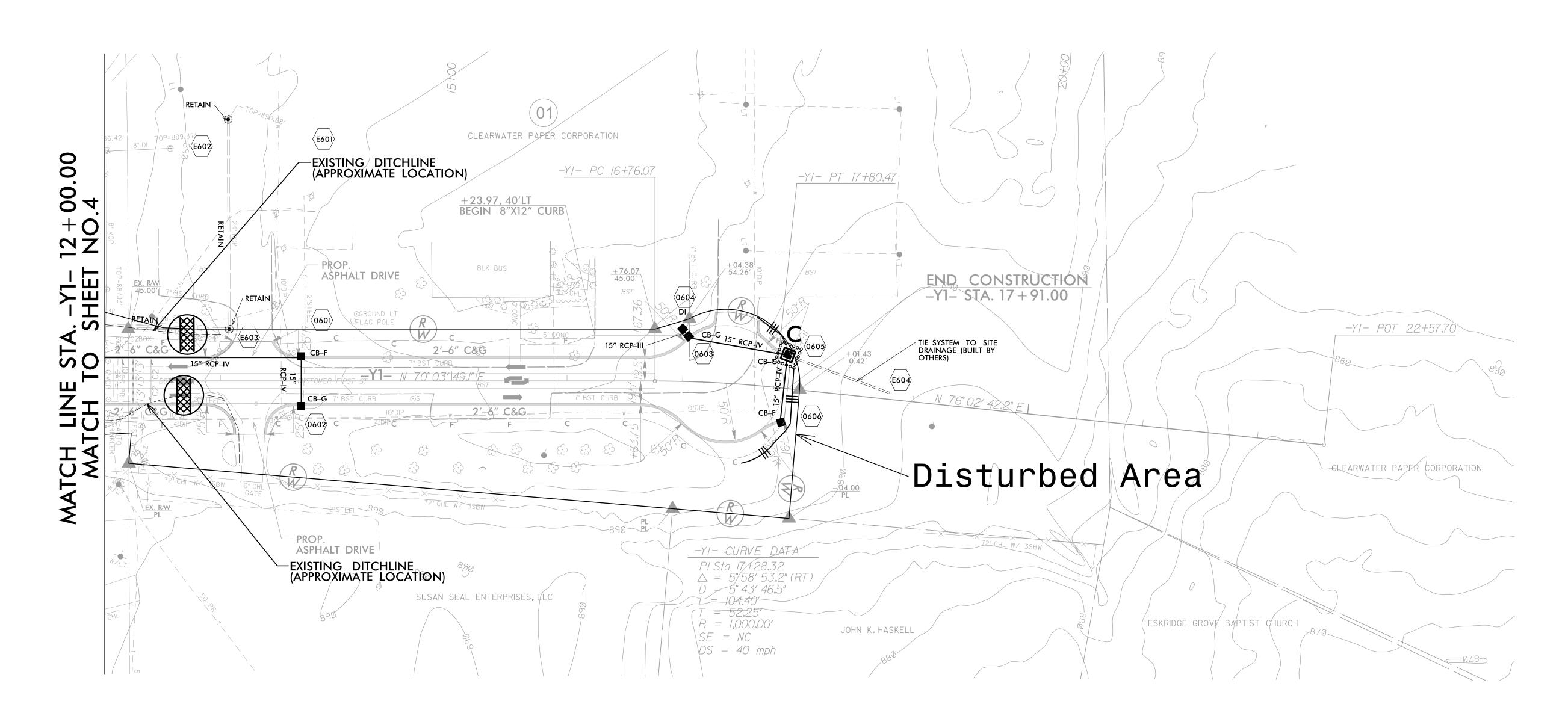


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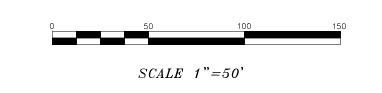
NOTES:

- FOR MAINTENANCE RESPONSIBILITY CONTACT: **BRIAN HOAGLUND (702)289-2459**
- -PROJECT ADDRESS: 658 WASHBURN SWITCH RD, **SHELBY, NC 28150**
- INSTALL GEOTEXTILE MATTING ON FILL SLOPES OF ALL BASINS (SEE DETAIL SHEET 3)
- NO LOCATIONS OUTSIDE OF DISTURBED AREA TO BE **USED AS CONSTRUCTION ROADS.**
- PROJECT IS LOCATED IN BROAD RIVER BASIN
- AREA TO BE SEEDED UPON COMPLETION IS +/- 3.6 **ACRES**
- ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DURING THE COURSE OF THIS PROJECT.



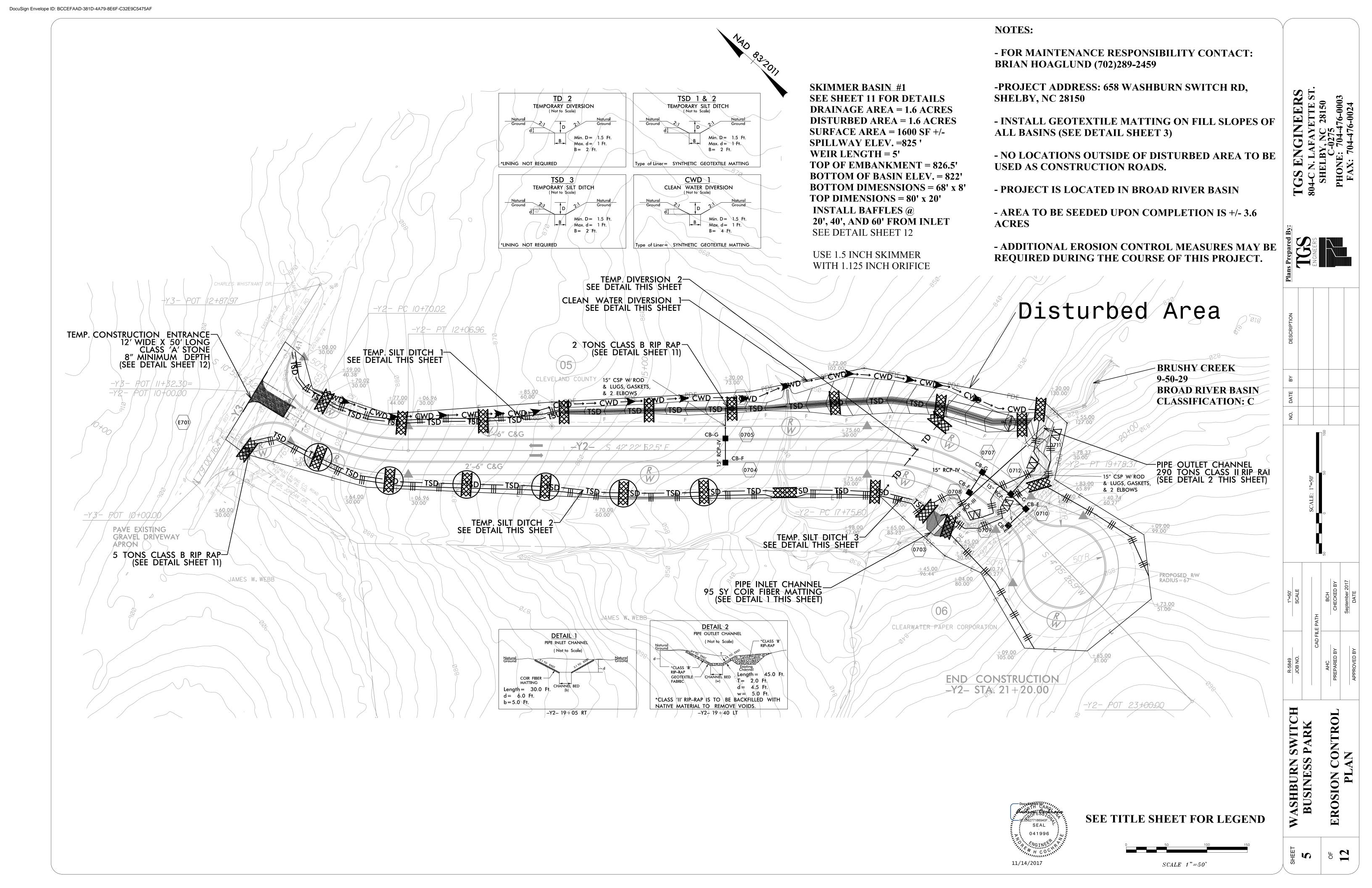


SEE TITLE SHEET FOR LEGEND



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CULVERT CONSTRUCTION SEQUENCE STA. 19 + 26 -L-

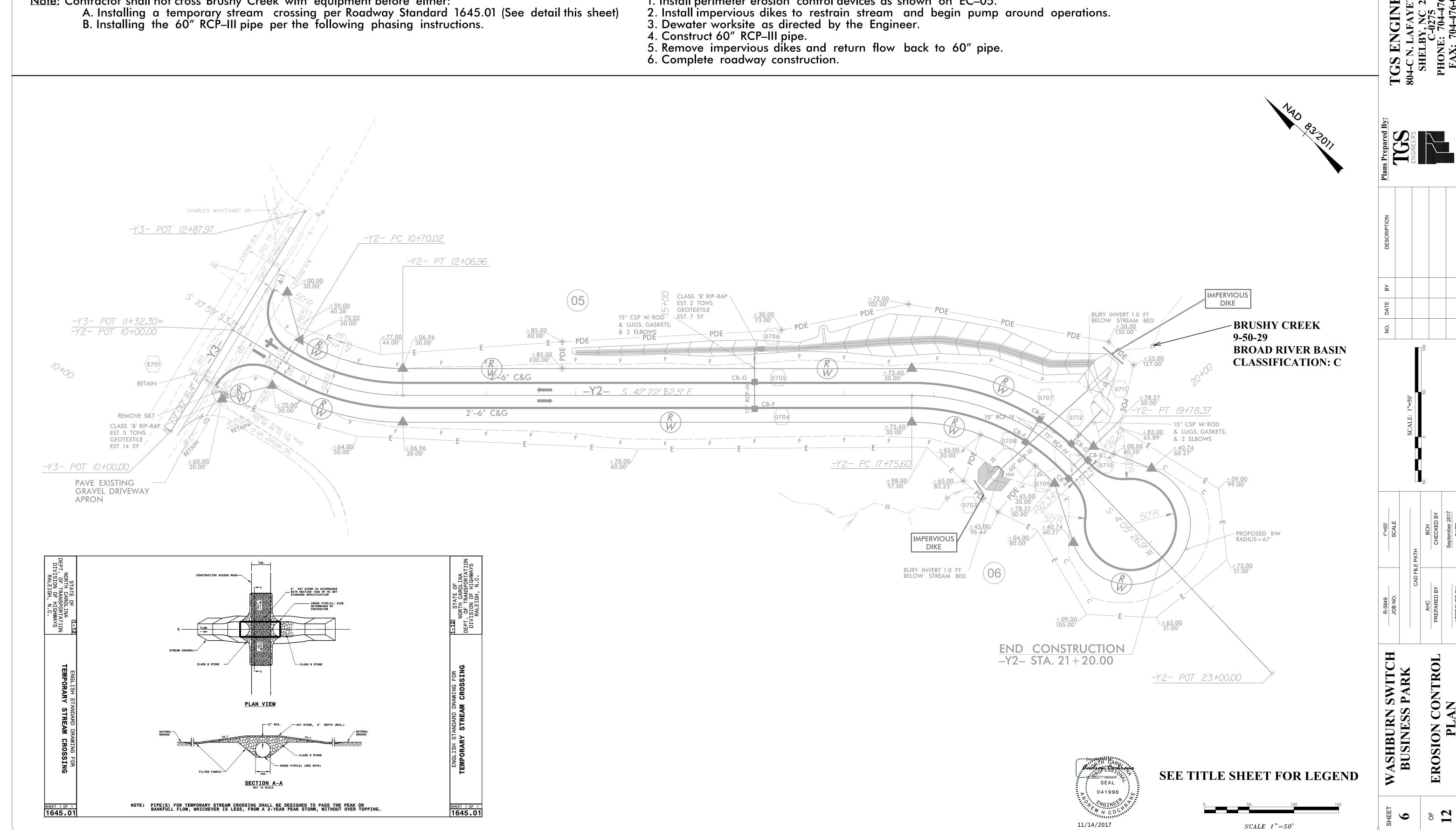
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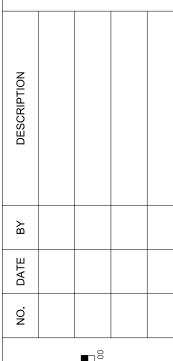
- Note: Contractor shall not cross Brushy Creek with equipment before either:

 A. Installing a temporary stream crossing per Roadway Standard 1645.01 (See detail this sheet)

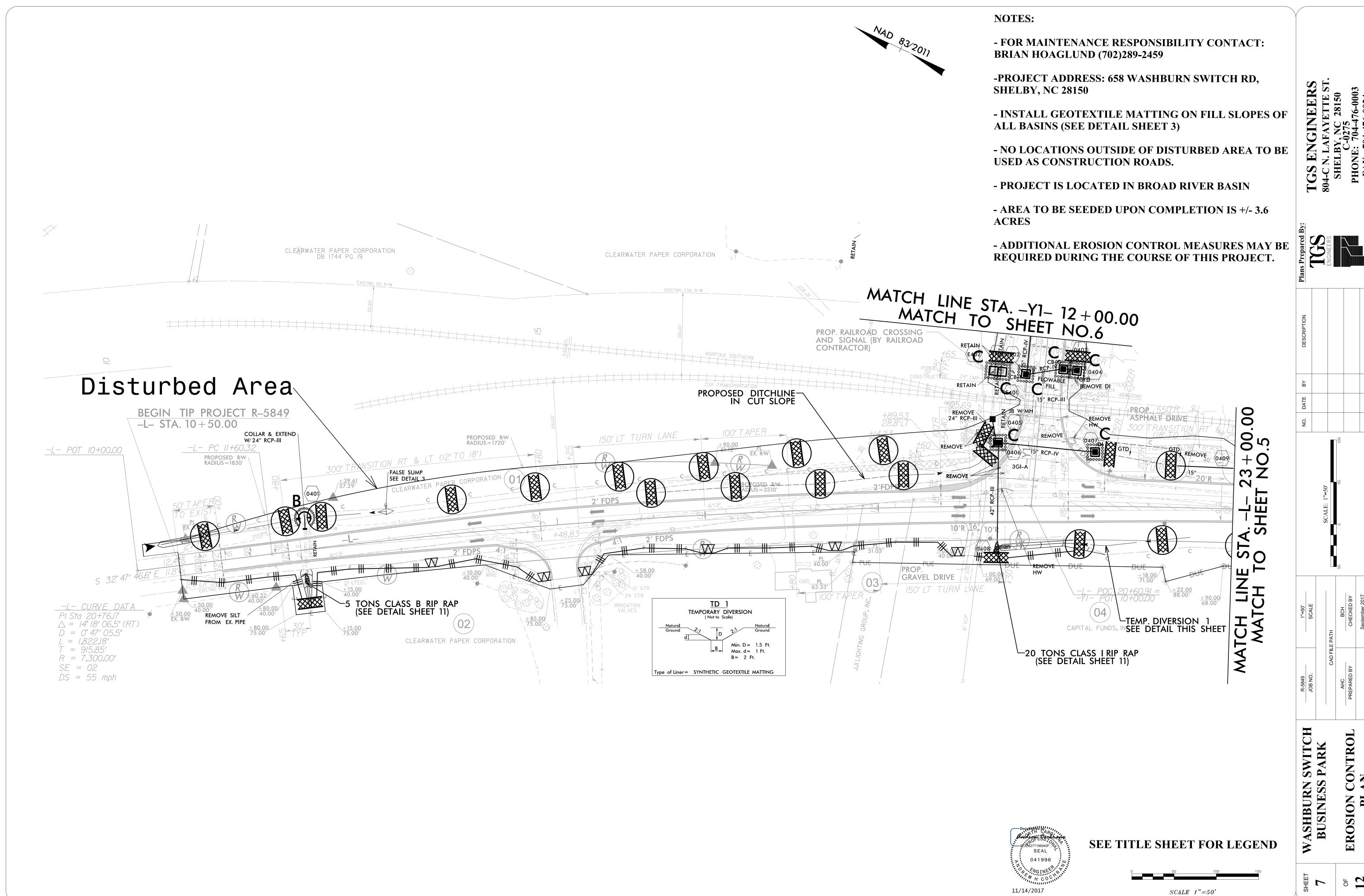
 B. Installing the 60" RCP—III pipe per the following phasing instructions.

- 1. Install perimeter erosion control devices as shown on EC-05.





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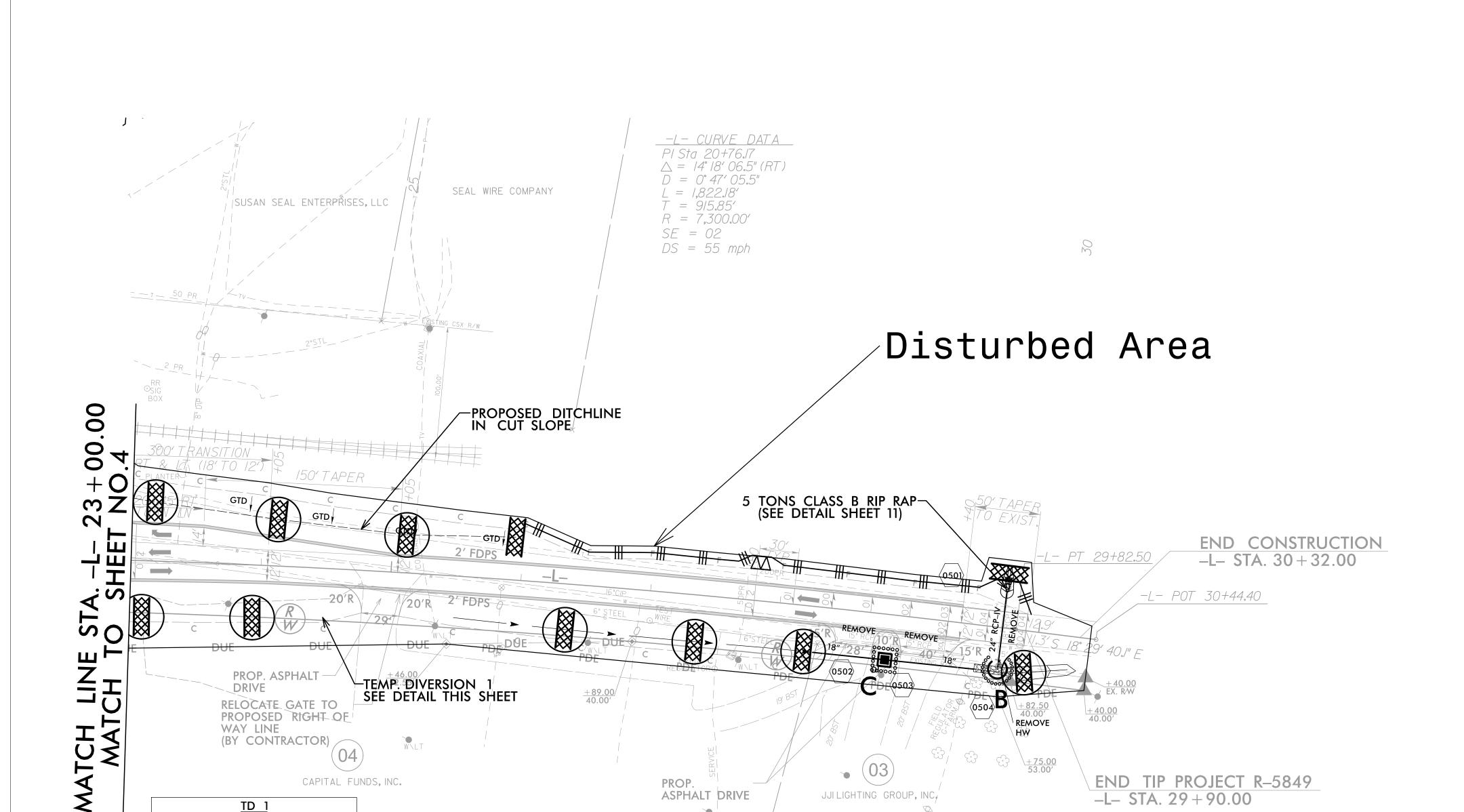
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TEMPORARY DIVERSION
(Not to Scale)

Type of Liner = SYNTHETIC GEOTEXTILE MATTING

Max. d = 1 Ft.





NOTES:

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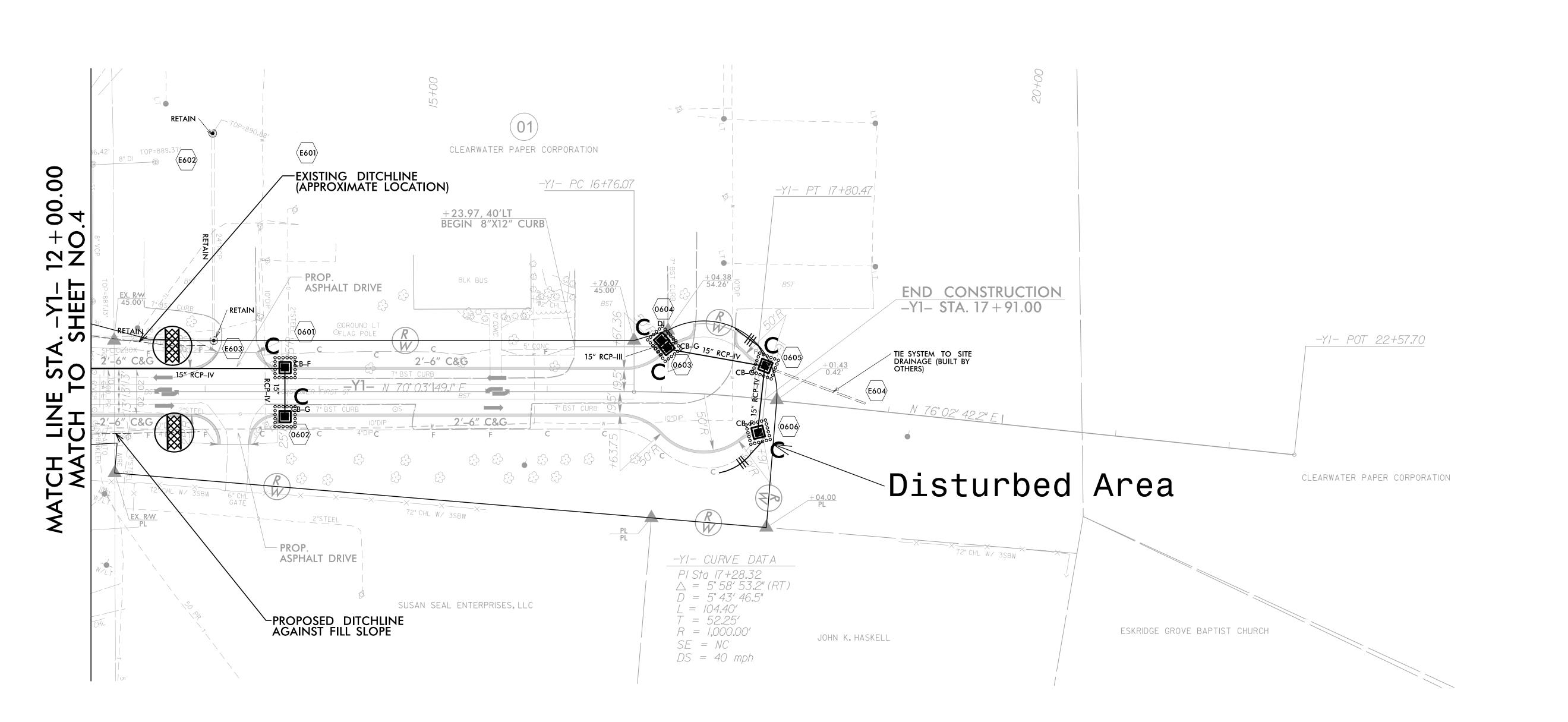
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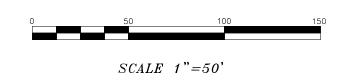
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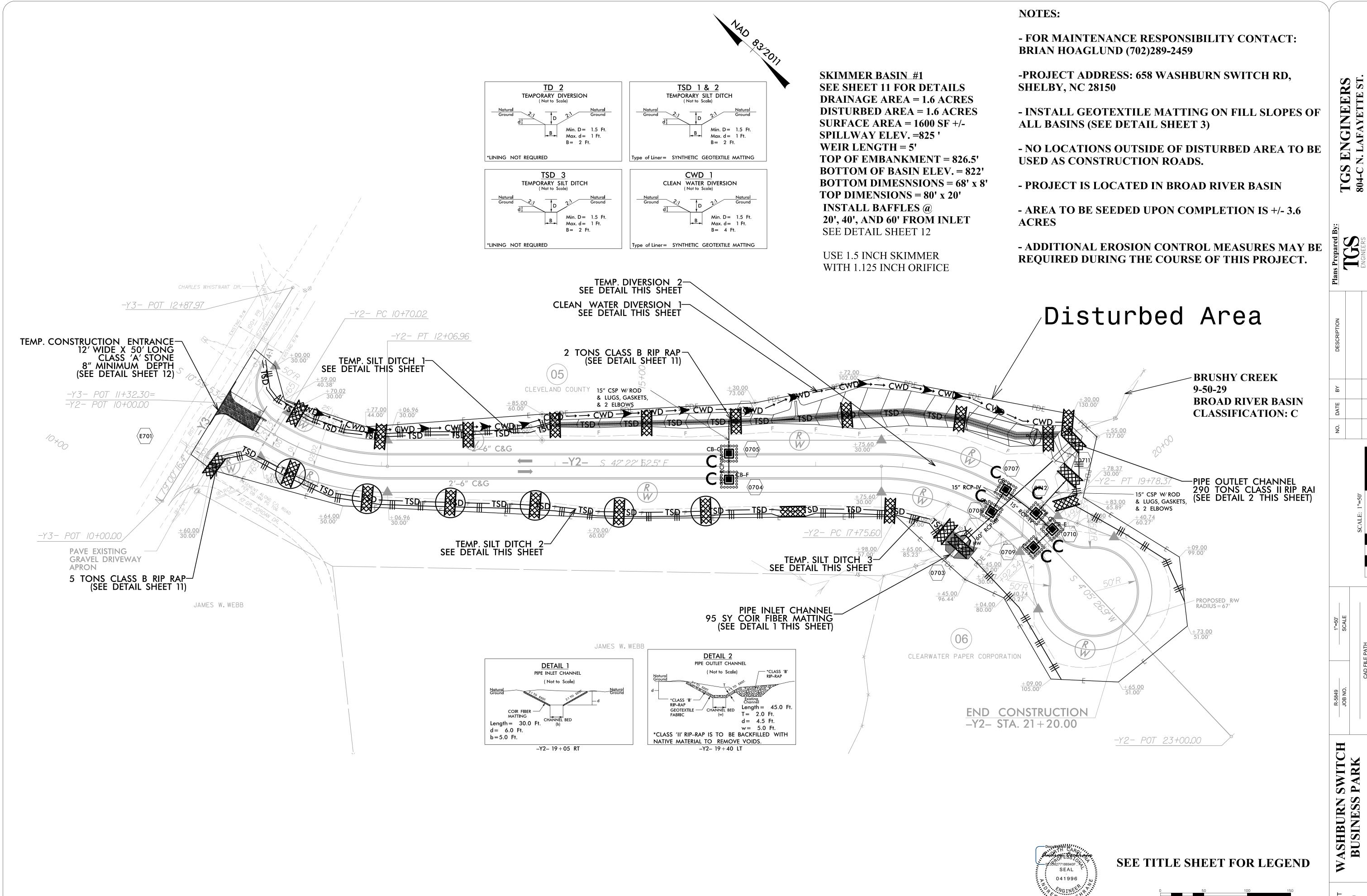
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SEE TITLE SHEET FOR LEGEND



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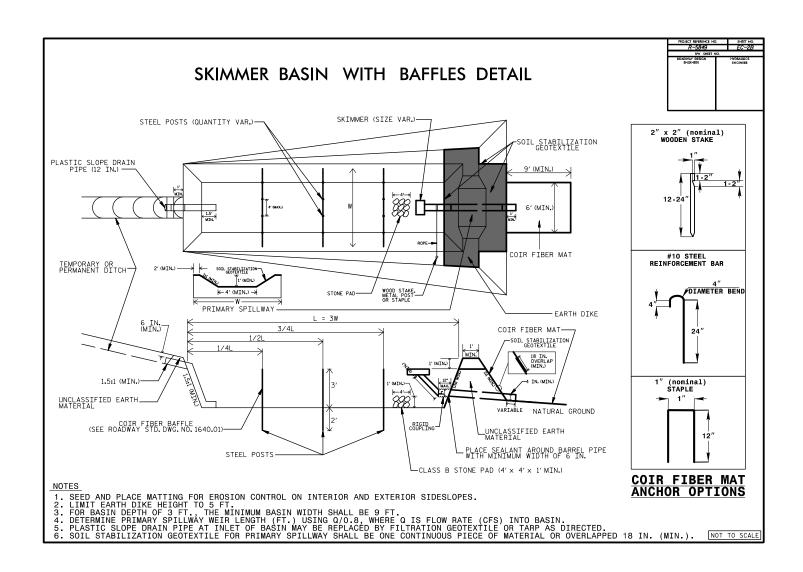


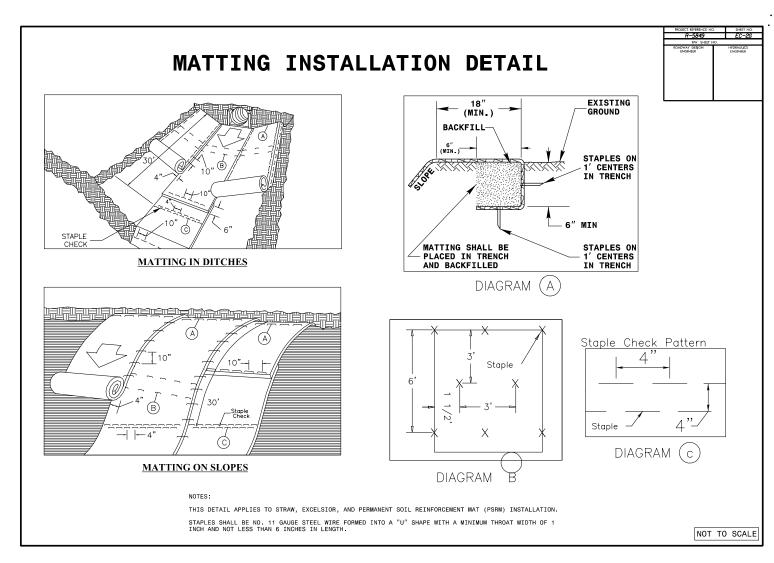
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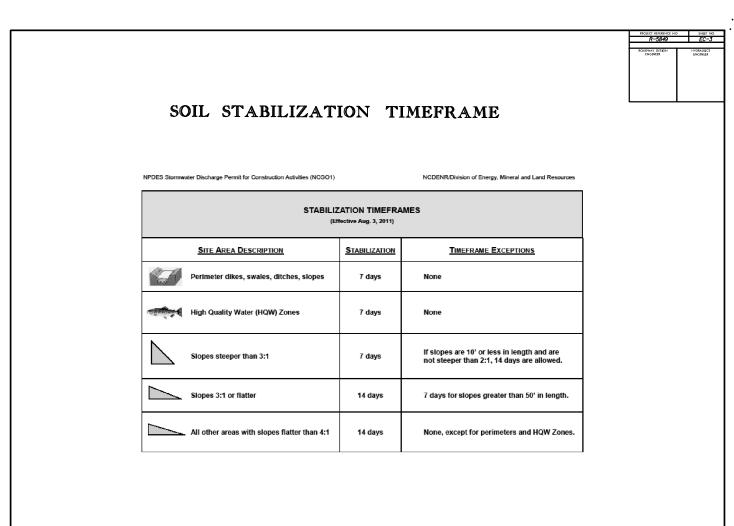
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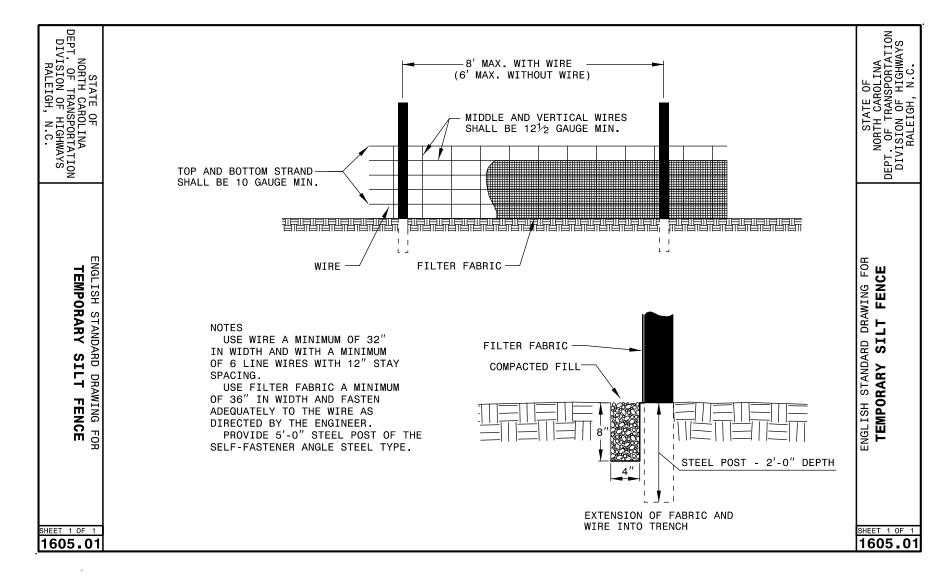
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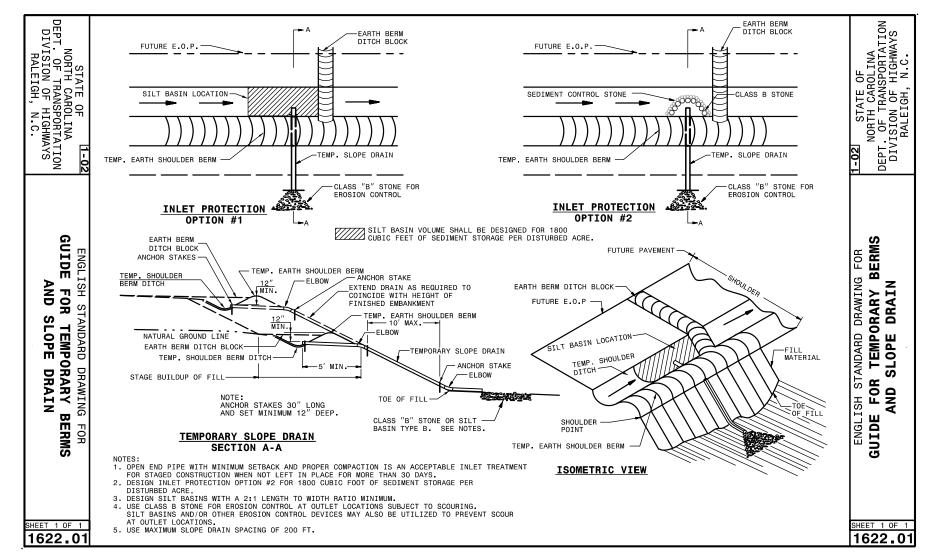
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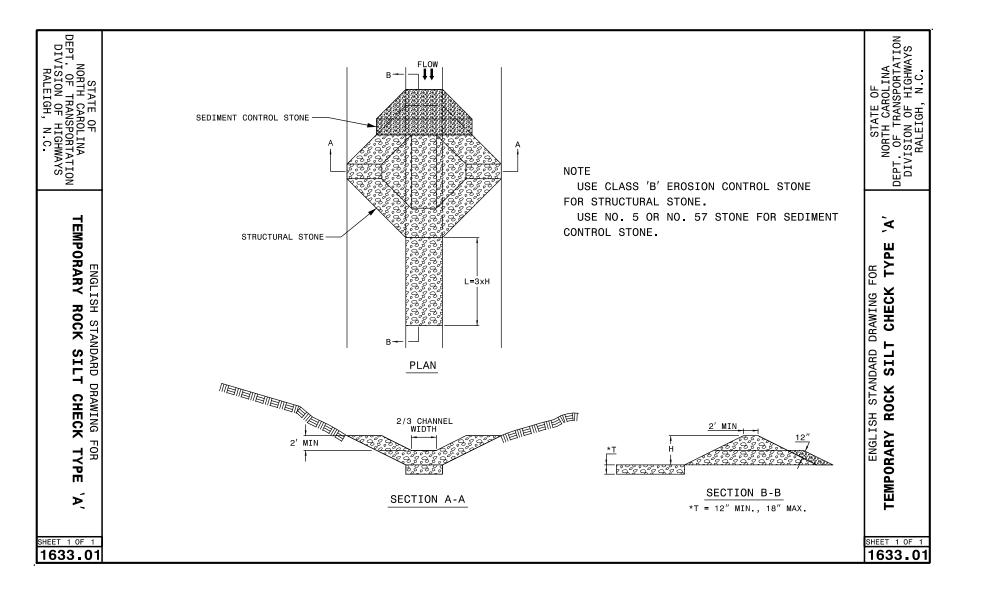












CONSTRUCTION SCHEDULE

- Obtain plan approval and other applicable permits.
- Flag or stake the work limits. Notify NCDENR and hold pre-construction conference at least one week prior to starting construction.
- Resolve utility conflicts, both those shown in the plans and those which may be revealed by NC One
- Install the Temporary Silt Fence and Silt Ditches as shown on plans.
- Install Skimmer Basins as shown on the plans.
- Install the rip-rap check dams as shown on the plans Ensure that the entire perimeter is protected from silt runoff.
- Perform clearing and grubbing for the site. Perform rough grading for the site.
- Install all drainage improvements as shown on the roadway plans.
- Perform Temporary Seeding and Mulching according to the Erosion Control Special Provisions. Dress up and reshape the shoulders, ditches, and other earthen areas and permanently stabilize the
- project according to the plans.
- BEFORE proceeding to step 14, consult with a representative of the Land Quality Section to obtain approval before removing any erosion control devices.

After approval by the Land Quality Section, remove all temporary measures and install permanent

Ground Stabilization

vegetation on the disturbed areas according to the Erosion Control Special Provisions. 16. Estimated time to stabilize site: 3 months

Soil stabilization shall be achieved on any area of a site where land disturbing activities have temporarily or permanently ceased according to the following schedule:

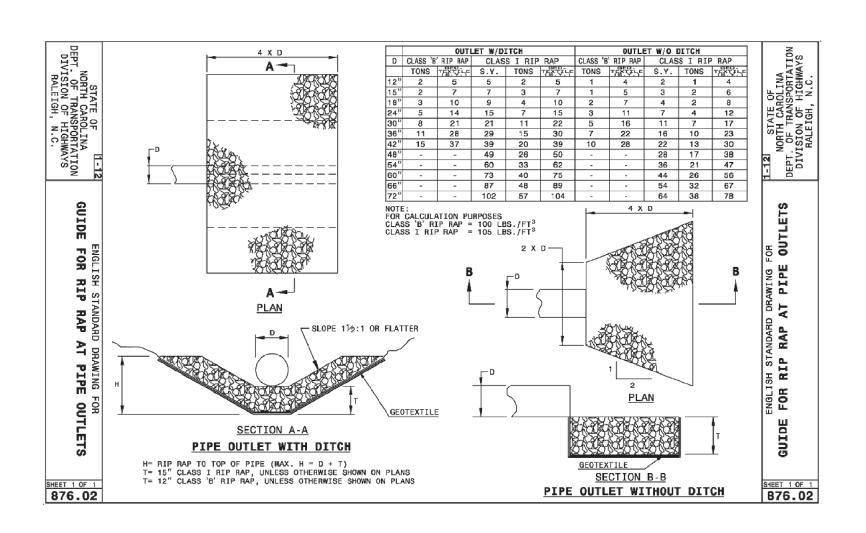
- 1. All perimeter dikes, swales ditches, perimeter slopes and all slopes steeper than 3 horizontal to one vertical (3:1) shall be provided temporary or permanent stabilization with ground cover as soon as practicable but in any event within 7 calendar days from the last land disturbing activity.
- 2. All other disturbed areas shall be provided temporary or permanent stabilization with ground cover as soon as practicable but in any event within 14 calendar days from the last land disturbing activity.

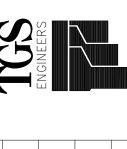
Maintenance Requirements

All erosion control measures shall be inspected at least weekly and after each significant (1/2) or greater) rainfall trapped sediment shall be properly removed from the erosion control measure and disposed of properly.

General Notes

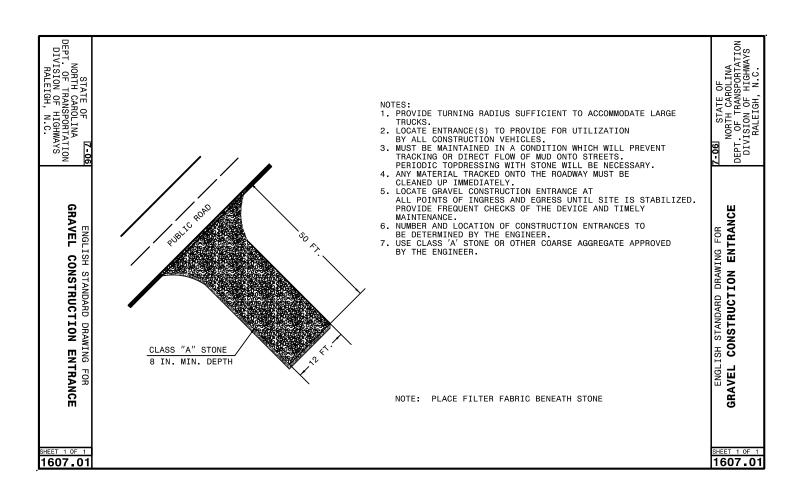
- 1. This project is located within the Broad River Basin.
- 2. The Limits of Disturbed Area for the project are shown on the plans.
- 3. Any off-site borrow and waste required for this project must come from a site with an approved erosion control plan, a site regulated under the Mining Act of 1971, or a landfill regulated by the Division of Solid Waste Management. Trash/debris from demolition activities or generated by any activities on site must be disposed of at a facility regulated by the Division of Solid Waste Management or per Division of Solid Waste Management or Division of Water Resources rules and regulations.
- 4. If stockpiling of dirt on roadways is necessary, sand must be used as the base. Cleanup of roadways
- must occur immediately after line installation.
- 5. For maintenance responsibility contact Brian Hoaglund (702-289-2459).

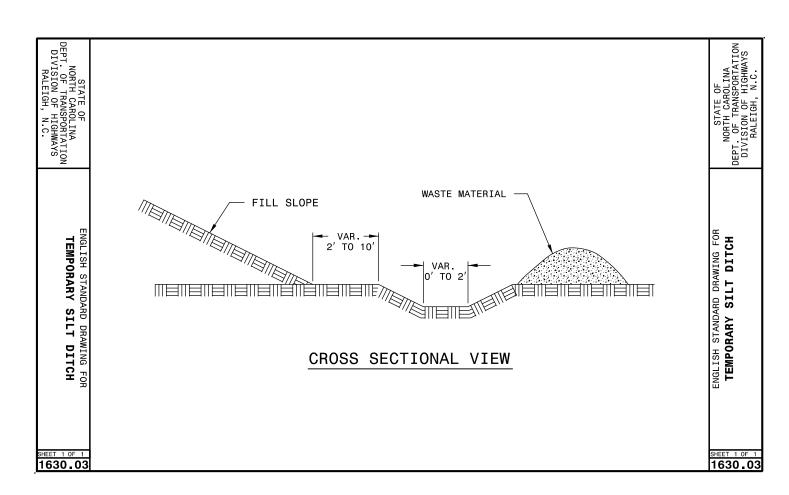


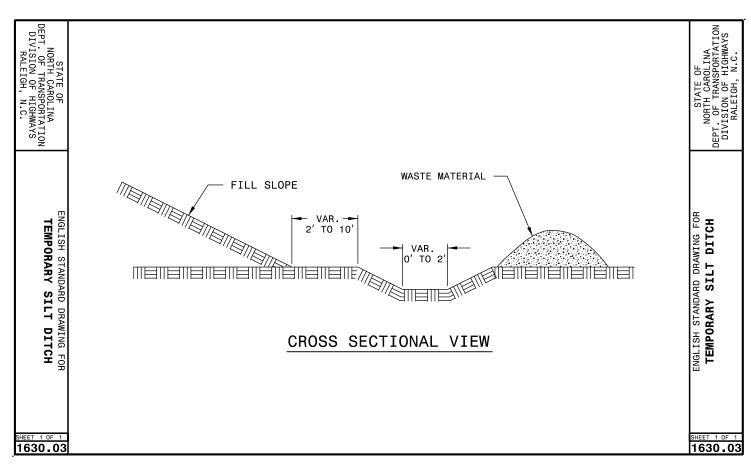


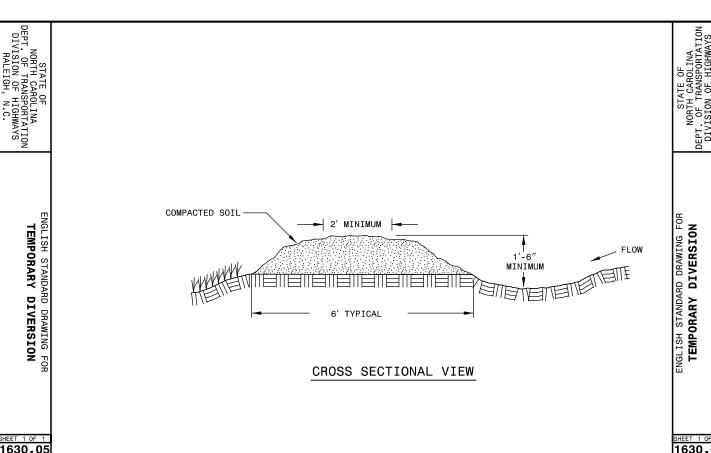
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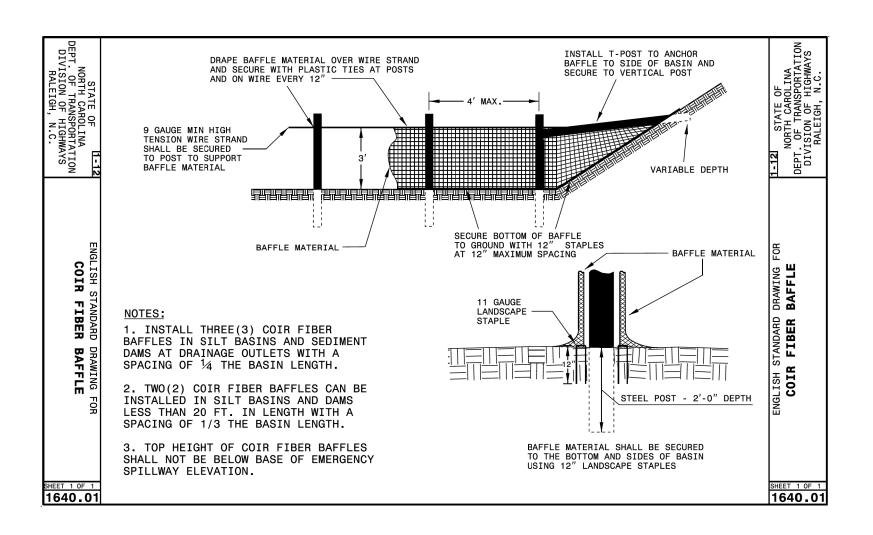
SWITCH PARK EROSION CONTROI PLAN











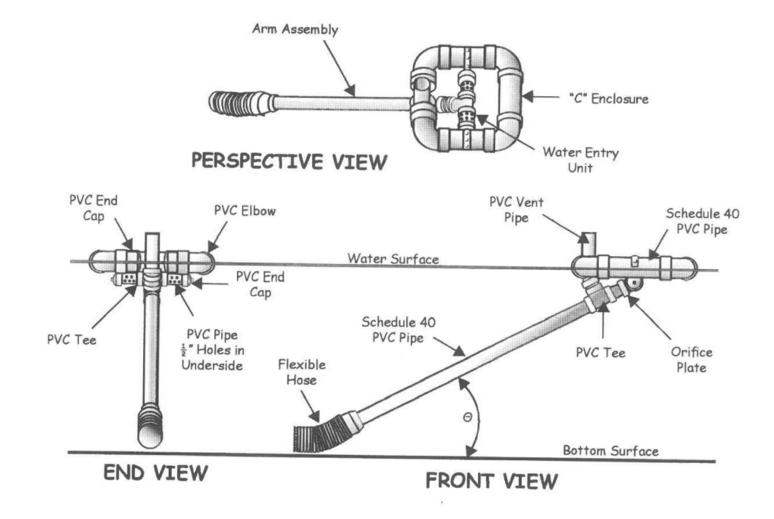
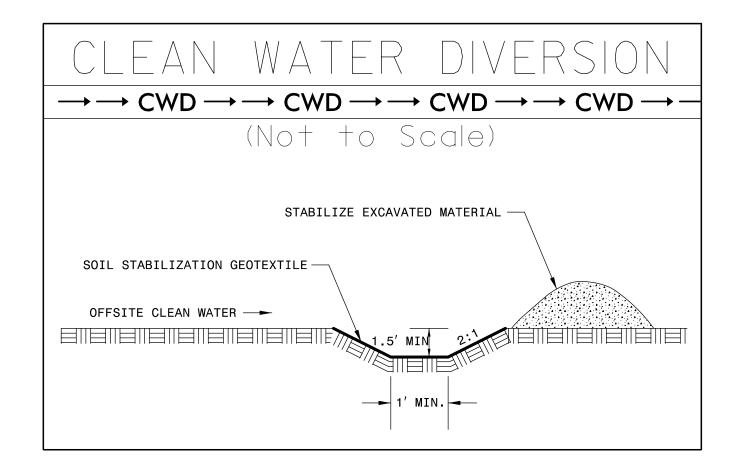
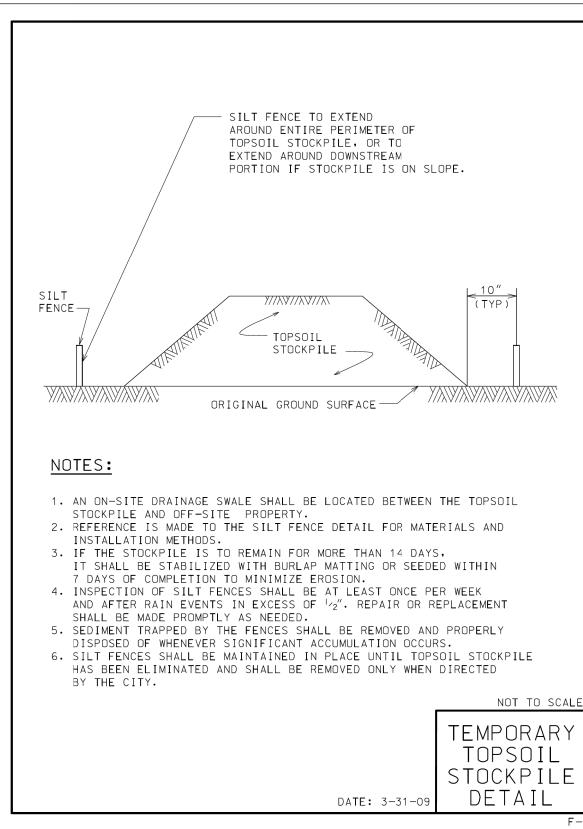
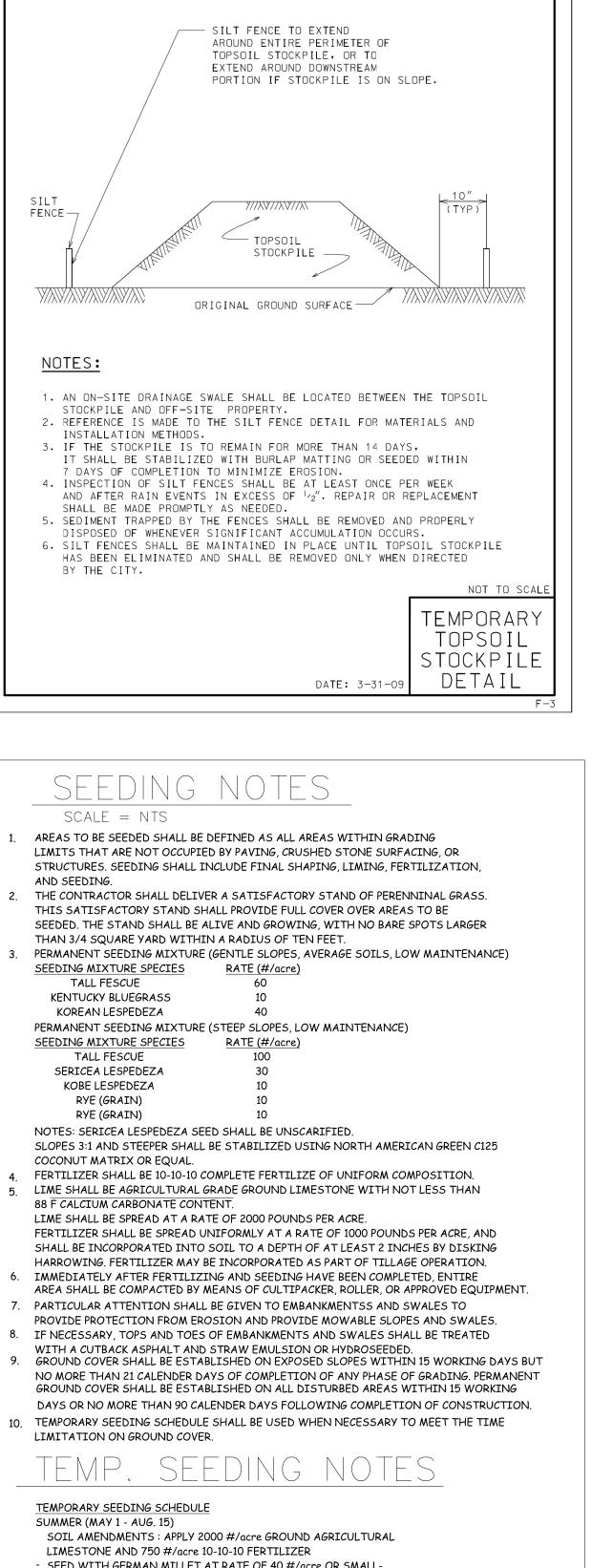


Figure 6.64a Schematic of a skimmer, from Pennsylvania Erosion and Sediment Pollution Control Manual,





- 1. AREAS TO BE SEEDED SHALL BE DEFINED AS ALL AREAS WITHIN GRADING LIMITS THAT ARE NOT OCCUPIED BY PAVING, CRUSHED STONE SURFACING, OR
- 2. THE CONTRACTOR SHALL DELIVER A SATISFACTORY STAND OF PERENNINAL GRASS. THIS SATISFACTORY STAND SHALL PROVIDE FULL COVER OVER AREAS TO BE
- 3. PERMANENT SEEDING MIXTURE (GENTLE SLOPES, AVERAGE SOILS, LOW MAINTENANCE) SEEDING MIXTURE SPECIES
- FERTILIZER SHALL BE 10-10-10 COMPLETE FERTILIZE OF UNIFORM COMPOSITION.
- LIME SHALL BE SPREAD AT A RATE OF 2000 POUNDS PER ACRE.
- AREA SHALL BE COMPACTED BY MEANS OF CULTIPACKER, ROLLER, OR APPROVED EQUIPMENT.
- PROVIDE PROTECTION FROM EROSION AND PROVIDE MOWABLE SLOPES AND SWALES.
- 9. GROUND COVER SHALL BE ESTABLISHED ON EXPOSED SLOPES WITHIN 15 WORKING DAYS BUT NO MORE THAN 21 CALENDER DAYS OF COMPLETION OF ANY PHASE OF GRADING. PERMANENT GROUND COVER SHALL BE ESTABLISHED ON ALL DISTURBED AREAS WITHIN 15 WORKING
- 10. TEMPORARY SEEDING SCHEDULE SHALL BE USED WHEN NECESSARY TO MEET THE TIME
- SEED WITH GERMAN MILLET AT RATE OF 40 #/acre OR SMALL-
- STEMMED SUNDANGRASS AT RATE OF 50 #/acre
- APPLY 4000 #/acre STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL.
- TEMPORARY SEEDING SCHEDULE
- FALL (AUG. 15 DEC. 30) SOIL AMENDMENTS: APPLY 2000 #/acre GROUND AGRICULTURAL
- LIMESTONE AND 1000 #/acre 10-10-10 FERTILIZER - SEED WITH RYE (GRAIN) AT RATE OF 120 #/acre.
- APPLY 4000 #/acre STRAW. ANCHOR STRAW BY TACKING WITH - ASPHALT, NETTING, OR A MULCH ANCHORING TOOL.



7